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A NEW HEMPHILLIA AND OTHER SNAILS FROM NEAR MT. HOOD, OREGON.

BY H. A. PILSBRY.

During an outing at Tawney's Hotel, on the Salmon River, 12 miles from Mt. Hood, elevation 1600 ft., Mr. J. G. Malone found a number of snails, among them a new slug, which may be described as follows.

HEMPHILLIA MALONEI n. sp. Pl. IV, fig. 9.

Most like *H. camelus* externally. The general color is dusky drab, becoming blackish brown on the tail. There are a few small black spots along the sides of the mantle, which has a very large opening exposing the shell. Pneumostome is about

midway of the mantle. Behind the mantle there is a short median impressed line, flanked by obliquely decurrent lines; followed posteriorly by irregular, coarse granulation, the end of the tail then becoming carinate. The pedal furrows rise behind, as in *H. camelus*, and there is no horn above their junction, and no specialized caudal mucous pore. The shell consists wholly of yellow periostracum, whatever lime it contained having been dissolved by the preserving fluid (formaldehyde). The mantle is smooth. Total length preserved in formaldehyde 33 mm.; length of mantle about 16 mm.; width of the sole 4.3 mm. Length of the shell about 10.5 mm.

The short penis (pl. 4, fig. 9) is produced laterally in an ample pocket which contains a large "papilla" attached distally, as shown by dotted line in the figure. There are also some smaller fleshy processes. The penial retractor (r. p.) is inserted at the origin of the epiphallus (epi.), as in H. camelus. The duct of the spermatheca (sp.) is narrow, as in H. glandulosa. H. danielsi Vanatta (Proc. A. N. S., Phila. 1914, p. 367) from Montana differs externally by having a smaller shell pore, and internally by the entirely different shape of the penis, with the penial retactor inserted on the epiphallus. The duct of the spermatheca is wide. The organ figured as a penial gland, in Mr. Vanatta's fig. 2, is apparently homologous with the large lateral penial pocket or sack of H. malonei.

Locality, Tawney's Hotel, on the Salmon River, 12 miles from Mt. Hood. Collected by J. G. Malone, August, 1916. Collection Acad. Nat. Sci., Phila., No. 115577.

This species resembles H. camelus in external appearance and by having the penial retractor inserted at the apex of the penis. It is more like H. glandulosa in the shape of the penis and the slender duct of the spermatheca.

One of the specimens had been extensively gnawed, evidently by the type specimen. Another, which had been confined in the same box, disappeared. Probably the survivors knew where their companion went.

Mr. Malone found the following snails in the same neighborhood:

Ariolimax sp. (common, but not collected).

Epiphragmophora fidelis Gray.
Polygyra columbiana Lea.
Pristiloma sp., fragment.
Circinaria vancouverensis Lea.
Circinaria sportella hybrida Ancey.
Goniobasis plicifera silicula Gld.

PHILOMYCUS IN ARIZONA.

BY H. A. PILSBRY.

In the course of our desert journey of 1910, the Santa Rita Mountains, in southern Arizona, were visited. The party (Messrs. Ferriss, Daniels, and the writer) camped at the head of Agua Caliente canyon, somewhat above the 7000-foot contour. A two-day trip was made eastward across Madera canyon, and over the saddle north of Old Baldy, dropping down the eastern slope of the range to about the 6800-foot line. Some slugs picked up here (our Station 17), were thought to be all Agriolimax, but on closer inspection, three Philomycus were found in the lot. It is a new genus for Arizona; in fact, the place is over a thousand miles southwest of any record in this country. The species may be called Philomycus (Pallifera) arizonensis, n. sp. It is 20 mm. long, the sole 1.8 mm. wide. Color: above bister, below snuff brown (in alcohol). Jaw with few ribs. Type and two smaller specimens are No. 115575, A. N. S. P.

HENRY MELVILL GWATKIN.

Professor H. M. Gwatkin, widely known as a special student of molluscan radulæ, died during the first half of November. He was born at Barrow-on-Soar, Leicestershire, England, July 30, 1844, and was educated at Shrewsbury School and St. John's College, Cambridge. He took his B. A. at Cambridge in 1867, and was a Fellow of St. John's College from 1868 to 1874, Theological Lecturer from 1874 to 1891, and Dixie Professor of Ecclesiastical History from 1891 to the time of his death. He was Gifford Lecturer at Edinburgh, 1903–05, and in 1897 re-